CLAIMS

1. A method for growing crystals, comprising:

removing solvent from a first plurality of solutions of a compound simultaneously, to form solid; and

removing solvent from a second plurality of solutions of the compound simultaneously and at different rates, to form solid;

wherein the first plurality of solutions contain different concentrations of the compound,

the solvent is removed from the first plurality of solutions at substantially the same rate, prior to forming solid, and

the second plurality of solutions contain substantially the same concentration of the compound, prior to removing solvent.

2. The method of claim 1, wherein removing solvent from the first plurality of solutions is carried out before removing solvent from the second plurality of solutions.

3. The method of claim 1, wherein removing solvent from the first plurality of solutions is carried out after removing solvent from the second plurality of solutions.

4. The method of claim 1, wherein the rate of removing solvent from the first plurality of solutions, prior to forming solid, varies by at most 10% between each solution of the first plurality.

5. The method of claim 1, wherein the concentration of the compound in the second plurality of solutions varies by at most 10% between each solution of the second plurality, prior to removing the solvent.

6. The method of claim 1, wherein the rate of removing solvent from the first plurality of solutions, prior to forming solid, varies by at most 5% between each solution of the first plurality, and

the concentration of the compound in the second plurality of solutions varies by at most 5% between each solution of the second plurality, prior to removing the solvent.

7. The method of claim 1, wherein removing solvent from the first plurality of solutions is carried out until only solid remains.

8. The method of claim 1, wherein removing solvent from the second plurality of solutions is carried out until only solid remains.

9. The method of claim 2, wherein the concentration of the solutions of the second plurality is substantially the same as the concentration of one of the solutions of the first plurality.

10. The method of claim 3, wherein the rate of removing solvent from the first plurality of solutions, prior to forming solid, is substantially the same as the rate of removing solvent, prior to forming solid, from one of the solutions of the second plurality.

11. The method of claim 1, wherein the compound is a protein.

12. The method of claim 11, wherein the solutions further comprise a precipitant.

13. The method of claim 1, wherein the solvent comprises water.

14. The method of claim 6, wherein the compound is a protein,
the solution further comprises a precipitant, and
the solvent comprises water.

15. The method of claim 13, wherein the solid is a hydrate of the compound.

16. The method of claim 1, wherein the first plurality and the second plurality are each at least six.

17. The method of claim 14, wherein the first plurality and the second plurality are each at least six.

18. A device for growing crystals, comprising:

a housing forming a plurality of chambers, wherein each chamber forms a first opening through the housing, and

a plurality of evaporation members, wherein each evaporation member is in gaseous communication with at least one chamber,

wherein each evaporation member has an effective A/L of at most 1 mm.

19. The device of claim 18, wherein the evaporation members are channels in the housing, each having a length of at most 100 mm, and a cross-sectional area of at most 1 mm^2.

20. The device of claim 19, wherein each chamber has a volume of at most 1700 mm^3.

21. The device of claim 20, wherein each chamber has a volume of at most 350 mm^3, and each channel has an A/L of at most 400 μm.

22. The device of claim 20, wherein each chamber forms a second opening through the housing, and each channel is a groove in the housing.

23. The device of claim 20, wherein the housing comprises at least 6 chambers.

24. The device of claim 20, wherein each of the channels has the same effective A/L.

25. The device of claim 20, wherein each of the channels has a different A/L.

26. A kit for growing crystals, comprising:

a first device, comprising:

a first housing forming a plurality of first chambers, wherein each first chamber forms a first opening through the first housing, and

a plurality of first evaporation members, wherein each first evaporation member is in gaseous communication with at least one of the first chambers,

a second device, comprising:

a second housing forming a plurality of second chambers, wherein each second chamber forms a first opening through the second housing, and

a plurality of second evaporation members, wherein each second evaporation member is in gaseous communication with at least one of the second chambers,

wherein the first and the second evaporation members each have an effective A/L of at most 1 mm,

the first evaporation members each have substantially the same effective A/L, and

the second evaporation members each have a different A/L.

27. The kit of claim 26, wherein the evaporation members are channels in the housing, each having a length of at most 100 mm, and a cross-sectional area of at most 1 mm^2.

28. The kit of claim 26, wherein each chamber has a volume of at most 1700 mm^3.

29. The kit of claim 27, wherein each chamber has a volume of at most 350 mm^3, and each channel has an A/L of at most 400 μm.

30. The kit of claim 27, wherein each chamber forms a second opening through the housing, and each channel is a groove in the housing.

31. The kit of claim 26, wherein the first and the second housings each comprises at least 6 chambers.

32. A method for growing crystals, comprising:

removing solvent from a first plurality of solutions of a compound simultaneously, to form solid; and

removing solvent from a second plurality of solutions of the compound simultaneously, to form solid;

wherein a third plurality of solutions selected from the group consisting of the first and second pluralities of solutions contain different concentrations of the compound,

the solvent is removed at different rates from a fourth plurality of solutions selected from the group consisting of the first and second pluralities of solutions,

the solvent is removed from the third plurality of solutions at substantially the same rate, prior to forming solid, and

the fourth plurality of solutions contain substantially the same concentration of the compound, prior to removing solvent.

33. The method of claim 32, wherein removing solvent from the first plurality of solutions is carried out before removing solvent from the second plurality of solutions.

34. The method of claim 32, wherein removing solvent from the first plurality of solutions is carried out after removing solvent from the second plurality of solutions.

35. The method of claim 32, wherein the rate of removing solvent from the third plurality of solutions, prior to forming solid, varies by at most 10% between each solution of the third plurality.

36. The method of claim 32, wherein the concentration of the compound in the fourth plurality of solutions varies by at most 10% between each solution of the fourth plurality, prior to removing the solvent.

37. The method of claim 32, wherein the rate of removing solvent from the third plurality of solutions, prior to forming solid, varies by at most 5% between each solution of the third plurality, and

the concentration of the compound in the fourth plurality of solutions varies by at most 5% between each solution of the fourth plurality, prior to removing the solvent.

38. The method of claim 32, wherein removing solvent from the first plurality of solutions is carried out until only solid remains.

39. The method of claim 32, wherein removing solvent from the second plurality of solutions is carried out until only solid remains.

40. The method of claim 33, wherein the concentration of the solutions of the fourth plurality is substantially the same as the concentration of one of the solutions of the third plurality.

41. The method of claim 32, wherein the compound is a protein.

42. The method of claim 41, wherein the solutions further comprise a precipitant.

43. The method of claim 32, wherein the solvent comprises water.

44. The method of claim 37, wherein the compound is a protein, the solution further comprises a precipitant, and the solvent comprises water.

45. The method of claim 32, wherein the first plurality and the second plurality are each at least six.